

ASA P.

Work Order ID 52997

October 20, 2009 1:44:45 PM



Page 1

Item ID: D3954-3

Accept



Setup Start



Revision ID: AB 10/21/09

Item Name: GWT Knob

Stop



Start Date: 10/21/2009 Start Qty: 4.00



Cust Item ID:

Required Date: 10/23/2009 Req'd Qty: 4.00



Customer:

Reference:

Approvals:

Process Plan: mf

Date: 09-10-20

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

100

0.00



Waterjet

FLOW CNC Waterjet

Memo

0.00

1-Cut as per Dwg D3854

Dwg Rev: A

Prog Rev: A

2-Deburr if necessary

18-10-22

6

110

QC2- Inspect parts off machine FAI/FAIB

0.00



QC

Quality Control

Memo

0.00

18-10-22

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			





NOTE: Date & initial all entries



Work Order ID 52997




October 20, 2009 1:44:45 PM



Page 2

Item ID: D3954-3 Accept  Setup Start 
Revision ID: A Stop 
Item Name: GWT Knob
Start Date: 10/21/2009 Start Qty: 4.00  Cust Item ID:
Required Date: 10/23/2009 Req'd Qty: 4.00  Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start 
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop 

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120  QC Quality Control	QC8- Inspect parts - second check Memo	0.00 0.00	SA 09/10/25			6	0		
130  Mill Conv Conventional Milling Machine	Memo 1-OPEN TO TAP DRILL SIZE 2-TAP AS PER DWG D3954	0.00 0.00	SA 09/10/25			6	0		
140  QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00	2) 809/10/26			46	0		

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 52997

October 20, 2009 1:44:45 PM



Page 3

Item ID: D3954-3

Accept



Setup Start



Revision ID: A

Stop



Item Name: GWT Knob

Start Date: 10/21/2009 Start Qty: 4.00



Cust Item ID:

Required Date: 10/23/2009 Req'd Qty: 4.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start



Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

150



Powdercoat

Powder Coating

Fire Red(Ref:4.3.5.10) per CSI005 4.3

Memo

START TIME: _____

OVEN TEMPERATURE: _____

FINISH TIME: _____

****MASK AS PER DWG****

yellow 0.00 ~~Bertrand~~
B 09.10.29
0.00

ml 09 10 29

160



QC

Quality Control

QC3- Inspect Part Finish

Memo

0.00

0.00

PB 09 10 29

170



Packaging

Packaging

Identify as per dwg & Stock Location: 139

Memo

0.00

0.00

C 9/14/29 (6)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 52997

October 20, 2009 1:44:45 PM



Page 4

Item ID: D3954-3

Accept



Setup Start



Revision ID: A

Stop



Item Name: GWT Knob

Start Date: 10/21/2009 Start Qty: 4.00



Cust Item ID:

Required Date: 10/23/2009 Req'd Qty: 4.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

180

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

09/10/29

MF
09-10-29

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

October 20, 2009 1:44:45 PM

Page 1

Work Order ID: 52997



Parent Item: D3954-3RevA



Parent Item Name: GWT Knob

Start Date: 10/21/2009

Required Date: 10/23/2009

Comments:

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
M304B0.375X03.000		Purchased	No			100	f	6.5800	0.1170	1.200		
											189-10-22	
M304 SS bar .375 x 3.00												

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

MAT

111369

6.58

6.58

111369

6

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

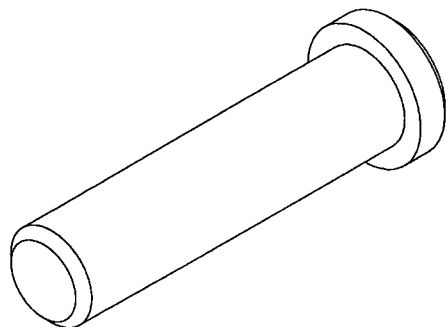
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

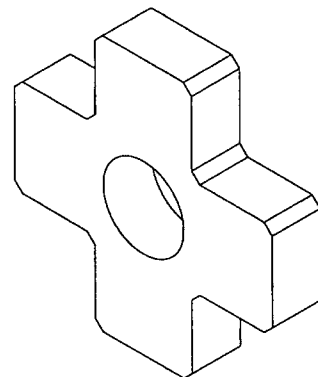
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NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

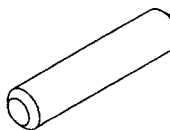


D3954-1 GWT PIN

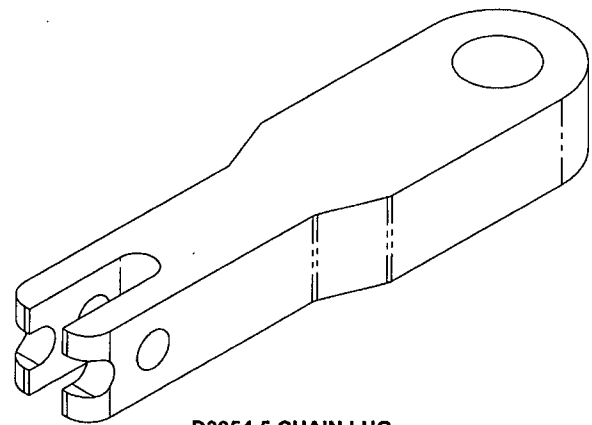


D3954-3 GWT KNOB

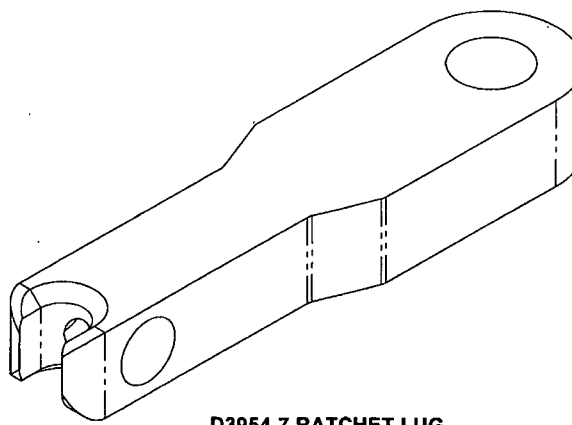
#52997



D3954-9 GWT CHAIN PIN





D3954-5 CHAIN LUG



D3954-7 RATCHET LUG

RELEASED
A/05/02/108

A		NEW ISSUE		AJS	09.05.26
REV.		DESCRIPTION		BY	DATE
DESIGN	AJS/DSTOW	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
DRAWN	AJS				
CHECKED		DRAWING NO.	REV. A		
MFG. APPR.		D3954	SHEET 1 OF 3		
APPROVED		TITLE	SCALE		
DE APPR.	N/A	MISC MACHINED PARTS GWT KIT	NTS		
DATE	09.05.26	COPYRIGHT © 2009 BY DART AEROSPACE LTD <small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS UNDERSTANDING THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>			

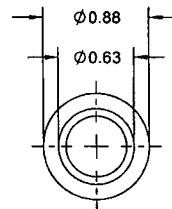
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

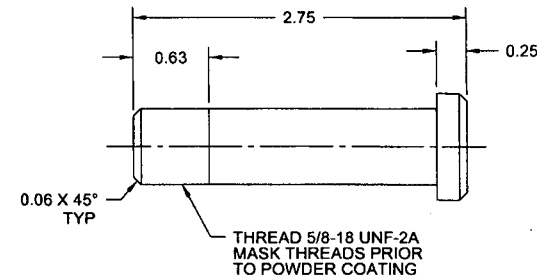
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NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

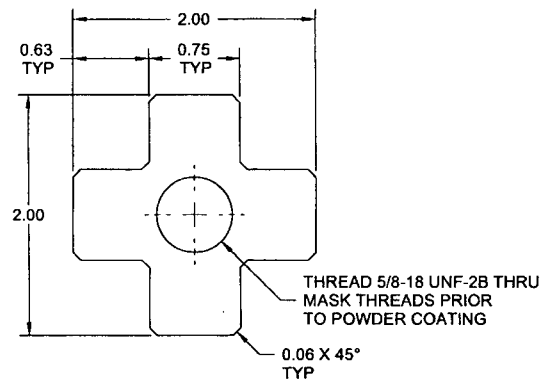
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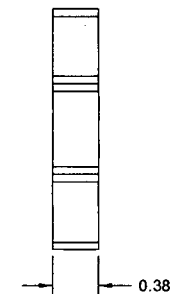
D3954-1 GWT PIN



\$52997



D3954-3 GWT KNOB



NOTES:

1) MATERIAL -1: AISI 303/304 STAINLESS STEEL ROUND BAR
REF DART SPEC M303/304R

-3: AISI 303/304 STAINLESS STEEL SHEET
PER AMS 5513 OR AMS 5524
REF DART SPEC M303/304S

OR: AISI 303/304 STAINLESS STEEL BAR
REF DART SPEC M303/304B

2) FINISH: POWDER COAT FIRE RED (4.3.5.10) PER DART QSI 005 4.3

3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED

4) UNITS: INCHES UNLESS OTHERWISE NOTED

5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX

6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3954-X" USING FINE POINT PERMANENT INK MARKER

7) WEIGHT -1: 0.26 lbs
-3: 0.23 lbs

RELEASED
9/18/02 MB

DESIGN	AJS/DSTOW	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D3954	SHEET 2 OF 3
APPROVED		TITLE	SCALE
DE APPR.	N/A	MISC MACHINED PARTS GWT KIT	NTS
DATE	09.05.26	<small>COPYRIGHT © 2005 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

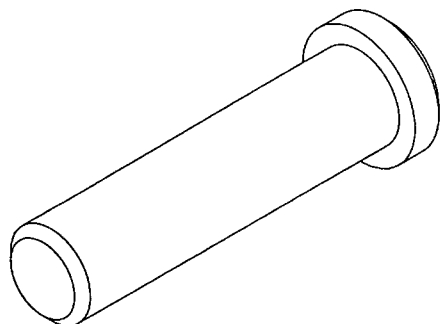
W/O:		WORK ORDER CHANGES					
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

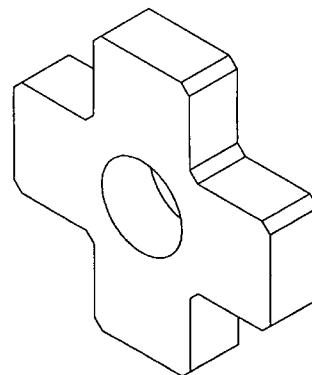
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

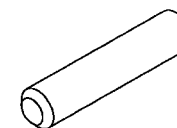
NOTE: Date & initial all entries



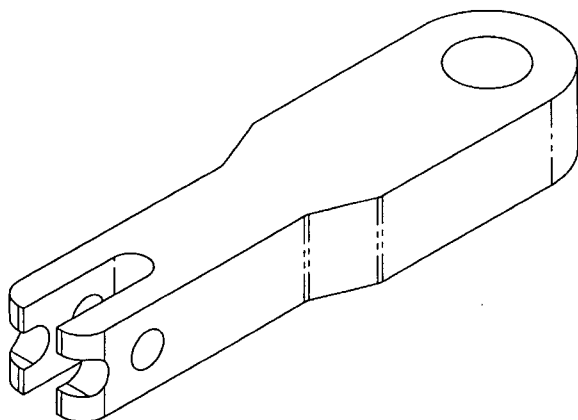
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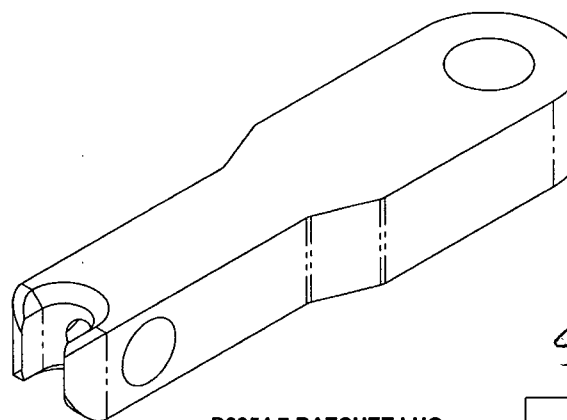
D3954-3 GWT KNOB



D3954-9 GWT CHAIN PIN




D3954-5 CHAIN LUG

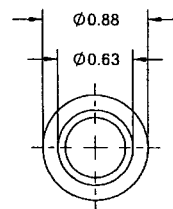


D3954-7 RATCHET LUG

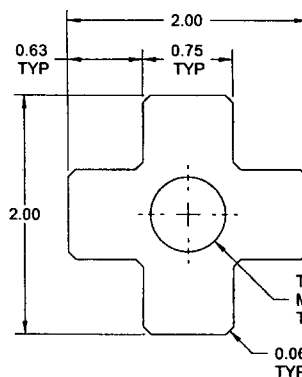
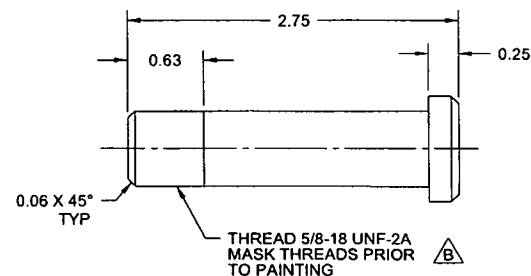
52997

RELEASED
R 2009-10-19
MP

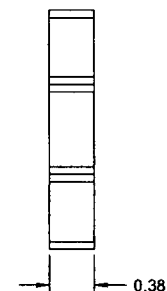
B	MATERIAL UPDATE FOR ALL COMPONENTS WAS STAINLESS STEEL IS CARBON STEEL FOR ALL COMPONENTS. FINISH FOR ALL COMPONENTS WAS RED POWDER COAT IS YELLOW SPRAY PAINT.	AJS	09.10.15
A	NEW ISSUE	AJS	09.05.26
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS/DSTOW	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED		DRAWING NO.	REV.
MFG. APPR.		D3954	SHEET 1 OF 3
APPROVED		TITLE	SCALE
DE APPR.	N/A	MISC MACHINED PARTS GWT KIT	NT
DATE	09.10.15	COPYRIGHT © 2009 BY DART AEROSPACE LTD <small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	



D3954-1 GWT PIN



D3954-3 GWT KNOB



NOTES:

1) MATERIAL -1: AISI 1010-1025 MILD STEEL ROUND BAR
PER DART SPEC M1018-R

-3: AISI 1010-1025 MILD STEEL SHEET
PER DART SPEC MS1010-S

OR: AISI 1010-1025 MILD STEEL BAR
PER DART SPEC M1010-B

ALTERNATE MATERIAL:

-1: AISI 303/304 STAINLESS STEEL ROUND BAR
REF DART SPEC M303/304R

-3: AISI 303/304 STAINLESS STEEL SHEET
REF DART SPEC M303/304S

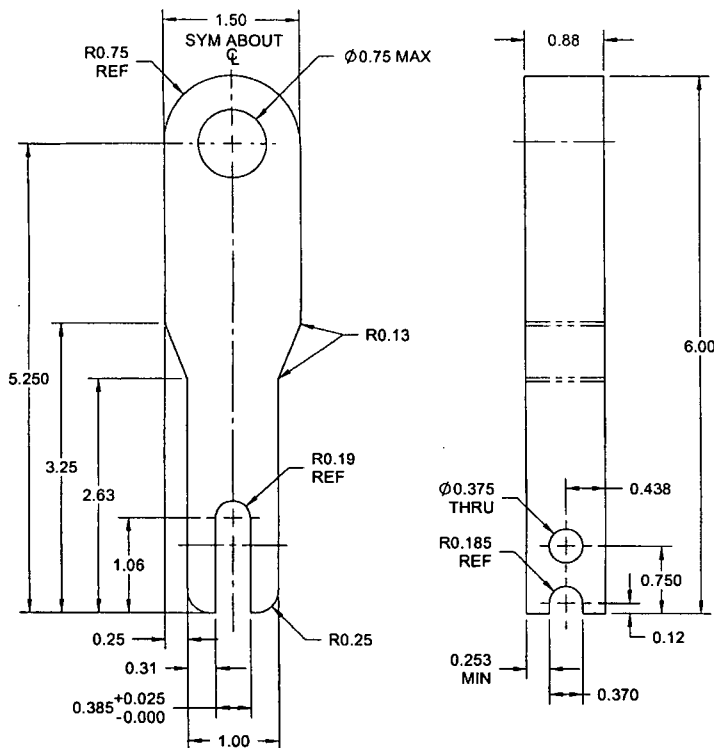
OR: AISI 303/304 STAINLESS STEEL BAR
REF DART SPEC M303/304B

- 2) FINISH: SPRAY PAINT YELLOW WITH BERTRAND CG1031B PER DART QSI 005 4.2
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3954-X" USING FINE POINT PERMANENT INK MARKER
7) WEIGHT -1: 0.26 lbs
-3: 0.23 lbs

52997

RELEASED
2009-10-19

DESIGN	AJS/DSTOW	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D3954	SHEET 2 OF 3
APPROVED		TITLE	SCALE
DE APPR.	N/A	MISC MACHINED PARTS GWT KIT	NTS
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D3954-5 CHAIN LUG

NOTES:

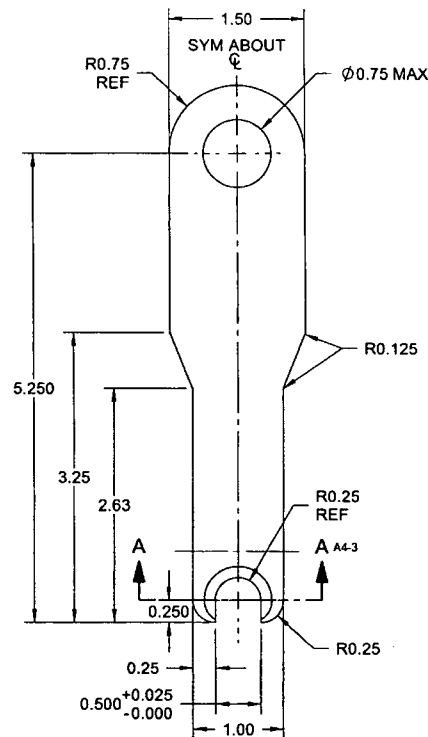
1) MATERIAL: -5/-7: AISI 1010-1025 MILD STEEL BAR
PER DART SPEC M1010-B

9: AISI 1010-1025 MILD STEEL ROUND BAR
PER DART SPEC M1018-R

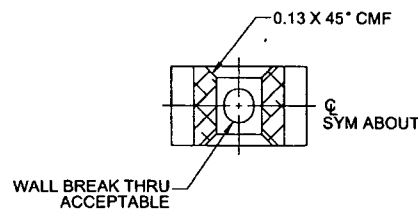
ALTERNATE MATERIAL:
-5/-7: AISI 303/304 STAINLESS STEEL BAR
REF DART SPEC M303/304B

-9: AISI 303/304 STAINLESS STEEL ROUND BAR
REF DART SPEC M303/304R

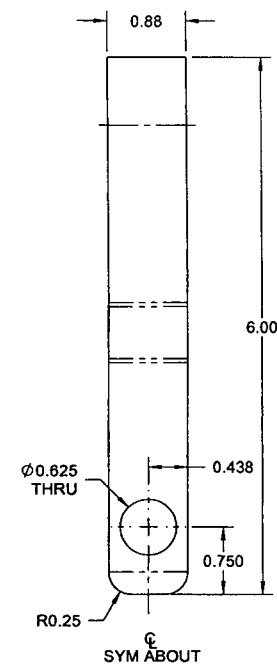
- 2) FINISH -7 ONLY: SPRAY PAINT YELLOW WITH BERTRAND CG1031B PER DART QSI 005 4.2
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3954-X" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT -5/-7: 1.56 lbs EACH
-9: 0.05 lbs



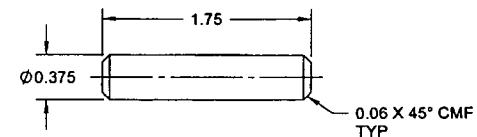
D3954-7 RATCHET LUG



SECTION A-A C3-3



D3954-9 GWT CHAIN PIN



DESIGN	AJS/DSTOW	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D3954	SHEET 3 OF 3
APPROVED		TITLE	SCALE
DE APPR.	N/A	MISC MACHINED PARTS GWT KIT	NTS
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RELEASED
2009-10-19